

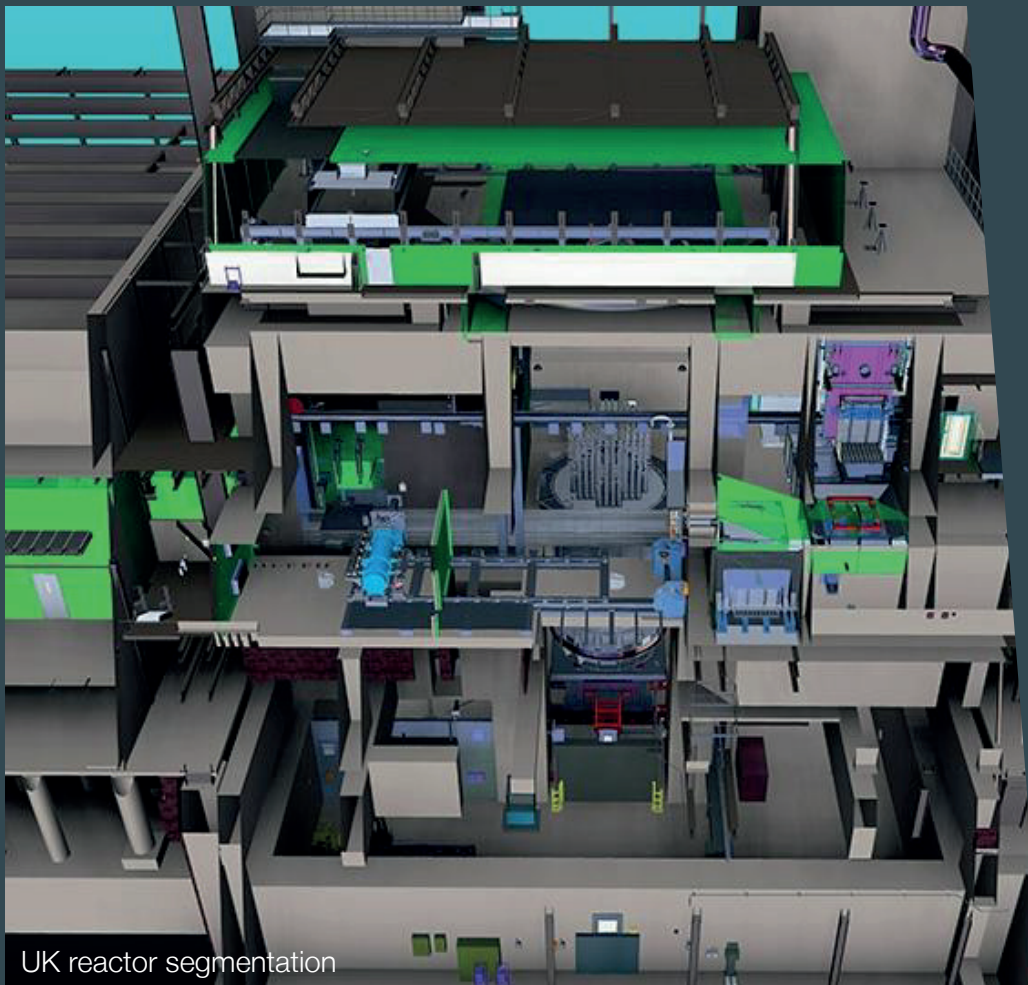


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JFN delivers radioactive source store for Hinkley Point C

BY. DAVID BUCHANON / JAMES FISHER NUCLEAR

James Fisher Nuclear (JFN) has successfully completed and handed over the new, secure on-site radioactive source store to EDF Energy at Hinkley Point C (HPC). The store will be used to safely house EDF Energy's fleet of sealed radioactive sources, which are used for non-destructive testing, critical to the completion of construction works at HPC.

The requirement for a store was realised during discussions about the provision of sealed radioactive sources with JFN sister company High Technology Source Limited (HTSL). Calling on proven experience in modular and containerised systems, JFN based the concept design on a single 40ft storage container. This enabled the overall footprint of the store to be kept to a minimum, reducing costs and technical risk while maximising value for money.

JFN worked with strategic radiation shielding partner, Aurora Health Physics Ltd, to determine the most efficient and ergonomic method of storing the radioactive sources. The store consists of four storage units, each containing 16 individual, lead-shielded cabinets to hold 64 sources.

Each source is stored in a projector within one of the custom modular storage cabinets. JFN worked with Nuclear Shields on the design and manufacture for the bespoke radioactive source storage cabinets. The cabinets, together with a computer terminal and programmable Radio-Frequency Identification (RFID) tags provide numbered, individual, lockable, computer-controlled storage for each source.

The system enables operators to be assigned access to specific storage compartments between specified working hours, allowing full traceability of each sources' projector at any time. The store

facilitates the safest means of centrally controlling the large number of radioactive sources, while reducing onerous permit processes, saving time and money during operations on site.

Gez Farnsworth, CRF Project Manager Civils Programme for Hinkley Point C, says, "The provision of this Radioactive Source Store presented many challenges, starting with gathering requirements from several contractors on the number and type of sources they are likely to use on site in the next 6 years. Some of the projects needing to store sources are at a very early stage, so we needed a store that would provide flexibility whilst meeting the high level of safety and security control that is expected at this site.

Carrying out work for the first time on a Nuclear Licensed Site can be problematic for any contractor, and the James Fisher team were required to interact and meet the needs of many stakeholders here at HPC. By demonstrating a resilient approach and willingness to coordinate closely with our Engineering and Construction teams, James Fisher were able to provide us with a product that should serve the HPC project well, with the potential for re-use at other facilities".

Following on from the success of the source store, JFN has established a working agreement with their strategic partners to offer an integrated engineering solution incorporating project management, design, manufacture, radiation protection calculation and source provision.

JFN's agreement with HTSL, Aurora Health Physics and Nuclear Shields provides a full-solution partnership for radioactive source storage, offering increased flexibility and lower execution risk, reducing costs and maximising value for money. □

